# American College of Radiology

## ACR Appropriateness Criteria®

### Suspected Osteomyelitis of the Foot in Patients with Diabetes Mellitus

**Variant 1:** Suspected osteomyelitis of the foot in patients with diabetes mellitus. Initial imaging.

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<th>Appropriateness Category</th>
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<th>Peds RRL</th>
<th>Rating</th>
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<th>Final Tabulations</th>
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**Study Quality**

1 (good) 2 (fair) 3 (poor) 4 (very poor)
### Variant 2:
Soft-tissue swelling without ulcer. Suspected osteomyelitis or early neuropathic arthropathy changes of the foot in patients with diabetes mellitus. Additional imaging following radiographs.

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<p>| CT foot with IV contrast | May be appropriate | Limited | ☢ &lt;0.1 mSv | ☢☢ 0.03-0.3 mSv [ped] | 5 | 5 | 0 | 0 | 0 | 1 | 9 | 2 | 0 | 0 | 0 |
|--------------------------|--------------------|--------|-------------|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
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| 16 (18025514)            | 4                  |        |             |                        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 17 (24764120)            | 4                  |        |             |                        |   |   |   |   |   |   |   |   |   |   |   |   |   |</p>
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| **Tc-99m 3-phase bone scan and In-111 WBC scan with SPECT/CT foot** | Strong | ☢☢☢☢ 10-30 mSv | 5 |
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| 47 (17138732) | 2 |
| 48 (14523585) | 3 |
| 49 (17146681) | 3 |
| 50 (27560470) | 3 |
| 51 (20851003) | 2 |

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| 39 (17460537) | 2 |
| 43 (15750157) | 3 |
| 42 (22801731) | 1 |
| 41 (23905618) | 4 |
| 40 (15680102) | 2 |
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**Radiation Dose Symbols:**
- ☢☢☢☢: 10-30 mSv
- ☢☢☢: 1-10 mSv
- ☢☢: <0.1 mSv
- ☢: 0.03-0.3 mSv [ped]

**Study Quality Symbols:**
- 3: Fair
- 4: Good
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### Study Quality

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### Variant 3: Soft-tissue swelling with ulcer. Suspected osteomyelitis of the foot in patients with diabetes mellitus with or without neuropathic arthropathy. Additional imaging following radiographs.

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Appendix Key
A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

**Appropriateness Category:** The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

**SOE:** Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- **References:** The citation number and PMID for the reference(s) associated with the recommendation.
- **Study Quality:** The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

**RRL:** Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

**Rating:** The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Median:** The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Final tabulations:** A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at www.acr.org/ac.